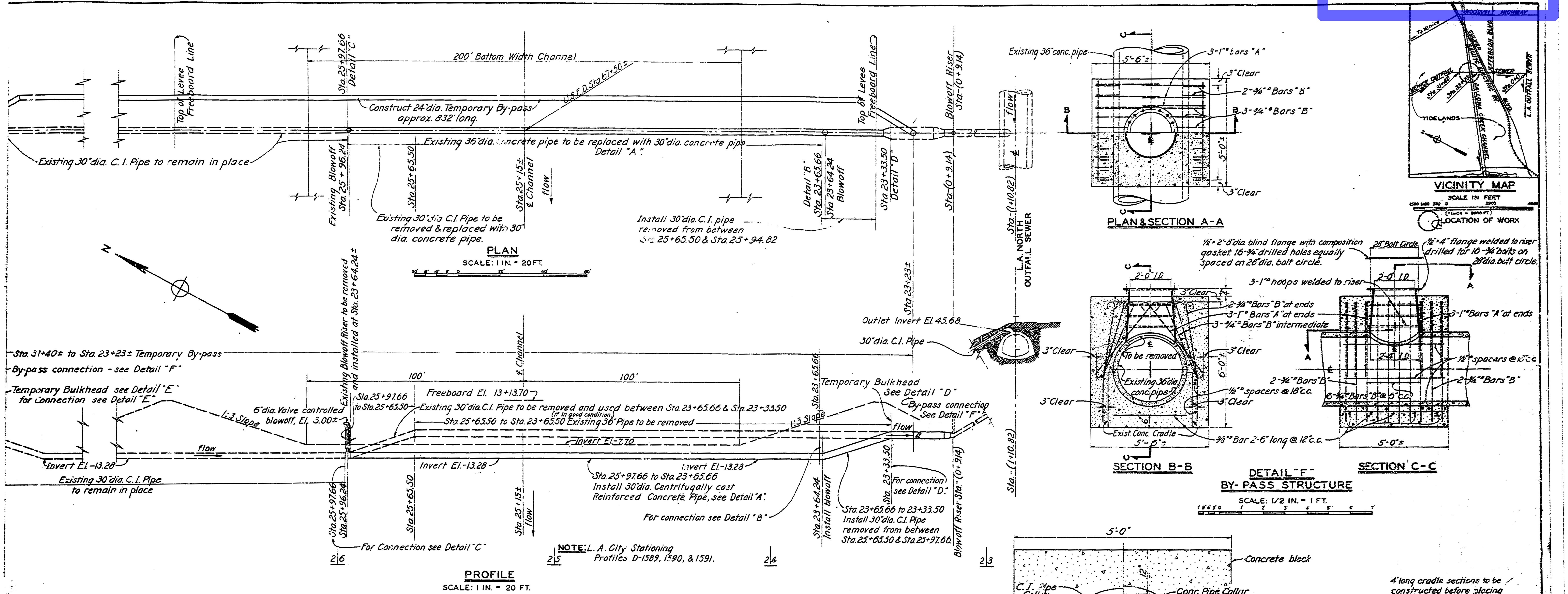
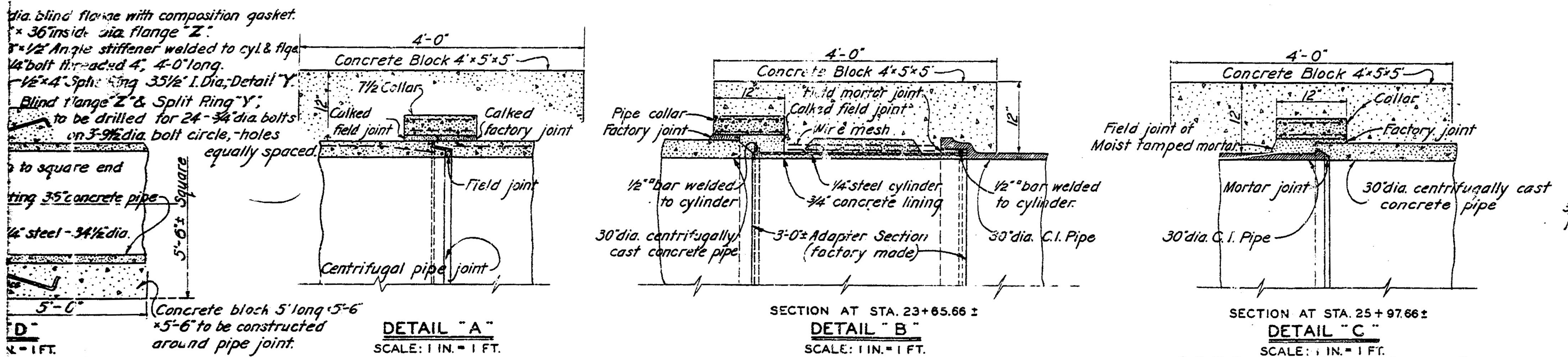
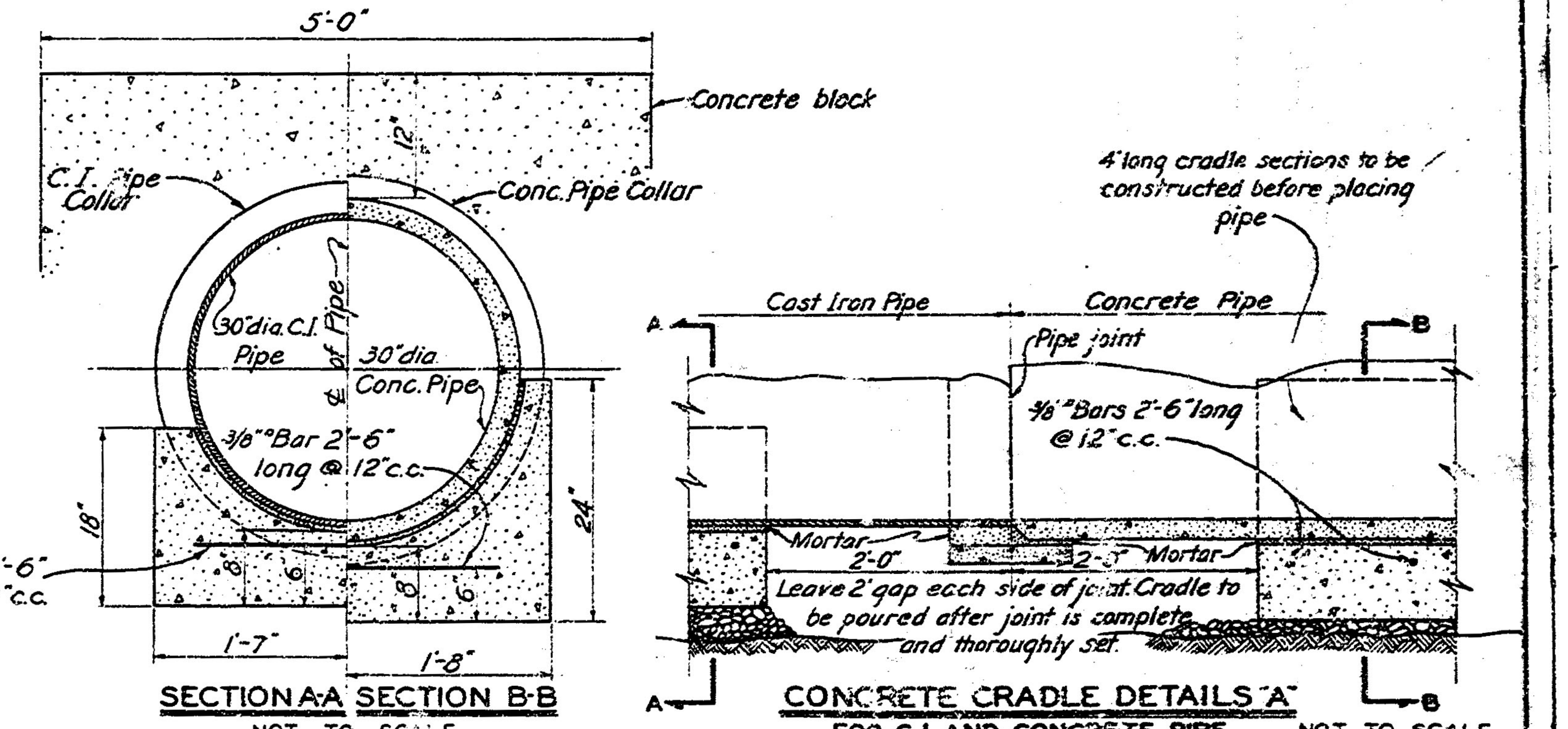
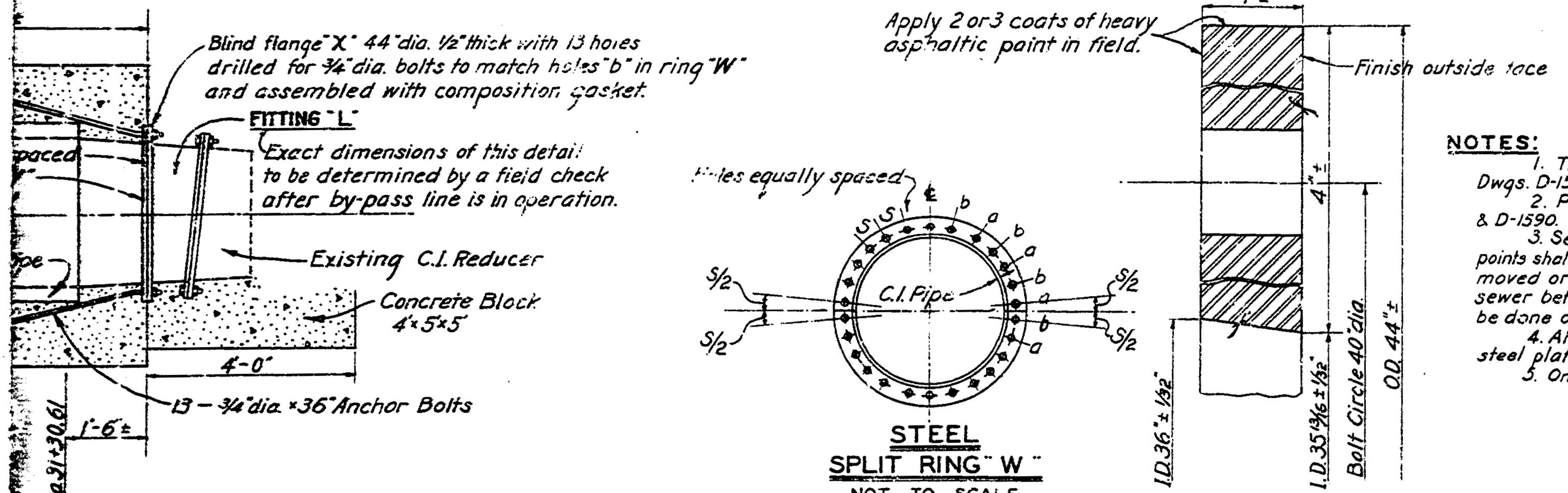
CORPS OF ENGINEERS, U.S. ARMY


200' Bottom Width Channel
Top of Levee Freeboard Line
Sta.25+97.66 Detail "C"
U.S.E.D. Sta.67+50±
Construct 24"dia. Temporary By-pass approx. 832' long.
Existing 36"dia. concrete pipe to be replaced with 30"dia. concrete pipe Detail "A".
Existing 30"dia. C.I. Pipe to remain in place
Existing Blowoff Sta.25+96.24
Sta.25+65.50
Sta.25+15± ℄ Channel
flow
Existing 30"dia C.I. Pipe to be removed & replaced with 30" dia. concrete pipe.
Install 30"dia. C.I. pipe removed from between Sta.25+65.50 & Sta.25+94.82
Detail "B" Sta.23+65.66
Sta.23+64.24 Blowoff
Sta.23+33.50 Detail "D"
Blowoff Riser Sta.-(0+9.14)
Sta.-(0+9.14)
Sta.-(1+10.82)
L.A. NORTH OUTFALL SEWER
Flow
PLAN
SCALE: 1 IN. = 20 FT.
N
Existing 36"conc. pipe
5'-6"±
3-1"ø bars "A"
3"Clear
2-¾"ø Bars "B"
3-¾"ø Bars "B"
5'-0"±
PLAN & SECTION A-A
VICINITY MAP
SCALE IN FEET
LOCATION OF WORK
ROOSEVELT HIGHWAY
TIDELANDS
½"×2'-8"dia. blind flange with composition gasket 16-¾" drilled holes equally spaced on 28"dia. bolt circle.
28"Bolt Circle
½"×4" flange welded to riser drilled for 16-¾" bolts on 28"dia. bolt circle.
3-1"ø hoops welded to riser
2'-0" I.D.
3"Clear
2-¾"ø Bars "B" at ends
3-1"ø Bars "A" at ends
3-¾"ø Bars "B" intermediate
3-1"ø Bars "A" at ends
½"ø spacers @ 18"c.c.
To be removed
Existing 36"dia. conc. pipe
6'-0"±
½"ø spacers @ 18"c.c.
2-¾"ø Bars "B"
6-¾"ø Bars "B" @ 6"c.c.
Exist. Conc. Cradle
⅜"ø Bar 2'-6" long @ 12"c.c.
5'-0"±
SECTION B-B
DETAIL "F" BY-PASS STRUCTURE
SCALE: 1/2 IN. = 1 FT.
SECTION C-C
Outlet Invert El. 45.68
30"dia. C.I. Pipe
Sta.23+23±
Sta.31+40± to Sta.23+23± Temporary By-pass
By-pass connection - see Detail "F"
Temporary Bulkhead see Detail "E" for Connection see Detail "E"
6"dia. Valve controlled blowoff, El. 3.00±
Existing Blowoff Riser to be removed and installed at Sta.23+64.24±
1:3 Slope
Sta.25+97.66 to Sta.25+65.50
100'
100'
Freeboard El. 13+13.70
Existing 30"dia. C.I. Pipe to be removed and used between Sta.23+65.66 & Sta.23+33.50 (if in good condition)
Sta.25+65.50 to Sta.23+65.50 Existing 36" Pipe to be removed
Invert El.-7.70
Invert El.-13.28
Existing 30"dia. C.I. Pipe to remain in place
Temporary Bulkhead See Detail "D"
By-pass connection See Detail "F"
Sta.25+97.66 to Sta.23+65.66 Install 30"dia. Centrifugally cast Reinforced Concrete Pipe, see Detail "A".
For connection see Detail "B"
For connection see Detail "D".
Sta.23+65.66 to 23+33.50 Install 30"dia. C.I. Pipe removed from between Sta.25+65.50 & Sta.25+97.66.
For Connection see Detail "C"
NOTE: L.A. City Stationing Profiles D-1589, 1590, & 1591.
26
25
24
23
PROFILE
SCALE: 1 IN. = 20 FT.


dia. blind flange with composition gasket.
× 36"inside dia. flange "Z".
×½" Angle stiffener welded to cyl. & flge.
¾"bolt threaded 4", 4'-0"long.
½"×4" Splice ring 35½" I.Dia. Detail "Y".
Blind flange "Z" & Split Ring "Y" to be drilled for 24-¾"dia. bolts on 39½"dia. bolt circle, holes equally spaced.
to square end
Existing 35"concrete pipe
¼" steel - 34½"dia.
5'-6"±
Square
5'-0"
"D"
= 1 FT.
4'-0"
Concrete Block 4'×5'×5'
7½"Collar
Calked field joint
Calked factory joint
Field joint
Centrifugal pipe joint
Concrete block 5' long ×5'-6" ×5'-6" to be constructed around pipe joint.
DETAIL "A"
SCALE: 1 IN. = 1 FT.
4'-0"
Concrete Block 4'×5'×5'
12"
Field mortar joint
Calked field joint
Wire mesh
Pipe collar
Factory joint
½"ø bar welded to cylinder
¼"steel cylinder
¾" concrete lining
½"ø bar welded to cylinder
30"dia. centrifugally cast concrete pipe
3'-0" Adapter Section (factory made)
30"dia. C.I. Pipe
SECTION AT STA. 23+65.66±
DETAIL "B"
SCALE: 1 IN. = 1 FT.
4'-0"
Concrete Block 4'×5'×5'
12"
Collar
Field joint of Moist tamped mortar
Factory joint
Mortar joint
30"dia. centrifugally cast concrete pipe
30"dia. C.I. Pipe
SECTION AT STA. 25+97.66±
DETAIL "C"
SCALE: 1 IN. = 1 FT.


5'-0"
Concrete block
C.I. Pipe Collar
Conc. Pipe Collar
30"dia. C.I. Pipe
30"dia. Conc. Pipe
⅜"ø Bar 2'-6" long @ 12"c.c.
⅜"ø Bar 2'-6" long @ 12"c.c.
18"
24"
1'-7"
1'-8"
SECTION A-A SECTION B-B
NOT TO SCALE
4'long cradle sections to be constructed before placing pipe
Cast Iron Pipe
Concrete Pipe
Pipe joint
⅜"ø Bars 2'-6"long @ 12"c.c.
Mortar
2'-0"
2'-0"
Mortar
Leave 2"gap each side of joint. Cradle to be poured after joint is complete and thoroughly set.
A
B
CONCRETE CRADLE DETAILS "A"
FOR C.I. AND CONCRETE PIPE
NOT TO SCALE

NOTES: Cradle to be laid in a dry trench with crushed rock or gravel mat if necessary for proper foundation.
If sheeted trench is used sheeting shall remain in place for 24 hours after pipe and cradle are in place.


Blind flange "X" 44"dia. ½"thick with 13 holes drilled for ¾"dia. bolts to match holes "b" in ring "W" and assembled with composition gasket.
FITTING "L"
Exact dimensions of this detail to be determined by a field check after by-pass line is in operation.
Existing C.I. Reducer
Concrete Block 4'×5'×5'
4'-0"
13-¾"dia. ×36" Anchor Bolts
1'-6"
Sta.31+30.61
2 FT.
Holes equally spaced
C.I. Pipe
S/2
a
b
I.D. 36"±½"
I.D. 35⅝"±½"
Bolt Circle 40"dia.
O.D. 44"±
4"±
1"±
Apply 2 or 3 coats of heavy asphaltic paint in field.
Finish outside face
STEEL SPLIT RING "W"
NOT TO SCALE

NOTES: Drill 13 holes "a" for ¾" anchor bolts on 40" bolt circle
Drill 13 holes "b" (alternate with "a") and tap for ¾"×1¾" Machine stud-bolts, U.S.S. thread. Both series of holes on 40"dia. bolt circle.
Split ring "W" to be accurately placed in vertical position.

NOTES:

1. This design is based on data taken from L.A. City Bureau of Engineering Dwgs. D-1589, D-1590, D-1591.
2. Plan and profile supersedes portions of L.A. City Bureau of Eng. Dwgs. D-1589 & D-1590.
3. Sewage drained or pumped from sewer at Sta. -(0+9.14) or at Sta. 25+96.24 or at other points shall be retained in sumps constructed for that purpose and any solids shall be removed or treated with chloride of lime and buried. If necessary, drainage of existing sewer between Sta. 80 and Sta. 31+30 and between Sta. 25+65 and Sta. -(0+9.14) shall be done only after chlorination as prescribed on Dwg. Serial No. 2608.1 ~~DL-1560~~
4. All flanges, blind flanges, fittings and connections shall be made from commercial steel plate with welded seams and connections.
5. One face of all flanges and blind flanges to be within 1/16" plane surface.

Area B

WORK ACCEPTED & COMPLETED	DATE	
(BOARD OF SUPERVISORS) L.A. Co. Flood Control	7-13-37	
BD. OF PUBLIC WORKS	8-4-37	73162
STREET MAINTENANCE DIV.		
SEWER & STORM DRAIN MAINT. DIV.	2-4-42	
CONSTRUCTION CHANGES RECORDED	None	BY R.A.

DRAWING REFERENCE
See Dwg. Serial No. 2658.1 for Special Fitting Details.
DL-1562
See DL-1642 for portion in Ballona Creek

DL 1561

FEDERAL PROJ. NO. 13-130 (LACFCD. NO. 1)

DATE	REVISION	REV.	CHK.	APP.
This Dwg. supersedes paper tracing, Serial No. 2657 dated Aug. 31, 1936.				

LOS ANGELES COUNTY FLOOD CONTROL

BALLONA CREEK

VENICE OUTFALL SEWER

RECONSTRUCTION DETAILS

SHEET 1 OF 2 SHEETS. SCALE: AS SHOWN.

DATUM IS MEAN SEA LEVEL

U.S. ENGINEER OFFICE, LOS ANGELES, CALIF., JAN. 18, 1936.

SUBMITTED BY: R. E. Cruse
CAPT. CORPS OF ENGINEERS, CHIEF, ENGINEERING DIVISION.

APPROVED BY:
MAJOR, CORPS OF ENGINEERS, DISTRICT ENGINEER.

DRAWN	TRACED	CHECKED	TO ACCOMPANY SPECIFICATIONS
L.J.M.	L.S.M.	H.S.K.	DATED:

SERIAL NO. 2657.1

FILE NO. 4/37 DL-1561